	Application No.	Applicant(s)
Notice of Allowability	10/658,838	WARWICK ET AL.
	Examiner	Art Unit	
	Samson B. Lemma	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *RCE filed on 04/25/2007*.

2. ☒ The allowed claim(s) is/are *1-29*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
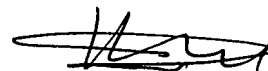
   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
      Paper No./Mail Date _____ .

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

KAMBIZ ZAND
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

1.   The request filed on April 25, 2007 for a request for continued examination

(RCE) under 37 CFR 1.114 based on patent application 10/658,838 is acceptable and

an RCE has been established.

2.   **Claims 1, 11-15 and 24** have been amended. **Claims 30-34** have been

cancelled. There are 3 independent claims left, namely 1, 14 and 24, of which all

of them are amended. No **new claims** are added. Thus **claims 1-29** are

pending/examined.

Allowable Subject Matter

3.   **Claims 1-29** are allowed.

4.   The following is an examiner's statement of reasons for allowance:

5.   **Independent claims 1, 14 and 24 are allowed for** the following reasons.

6.   The reference on the record, namely **the combination of Dicorpo and Narain**

discloses each and every limitation of the independent claims, before the claim were

amended.

       For instance, referring to the independent claim 1, 14 and 24, the primary

reference on the record namely, Dicorpo discloses in a computer system that

including a plurality of initiators, [Abstract, "plurality of initiators", and figure 1, ref.

Num "110" and "120"] **each for initiating communication with target devices**

[Abstract, see, "Physical device" and column 19, lines 17-19; figure 1, 5, 7 and 8]

(In some embodiments, the virtual LUN can have a specified interface definition, for example a

general definition that can emulate many different physical devices) **over a network,**

[column 11, lines 15-18] (Internet SCSI (iSCSI)-to-SCSI applications,) **a method for**

configuring the computer system to securely communicate with a target device

over the network, [Abstract, "an apparatus comprises a data path capable of coupling a

physical device to a plurality of initiators") **the method comprising the following performed by an abstraction module that configures each of the plurality of initiators in a manner that security conflicts between the plurality of initiators is avoided:** [Abstract, "A controller comprises an executable process that creates a virtual device object that resolves conflicting concurrent attempts to access the physical device by a plurality of initiators.")

- **An act of exposing a common interface that may be used to configure any of the plurality of initiators;** [Abstract and column 13, lines 34-36 and figure 7] (See abstact, "An interface is coupled to the data path and forms a command pathway between the plurality of initiators and the physical device". And on column 13, lines 34-36, it has been disclosed that the protocol interface 710 serves as a common interface point for external communications.)

- **An act of receiving an indication through the common interface that a selected initiator from among the plurality of initiators is to be configured to communicate with a selected target device;** [Abstract; column 4, lines 36-38; column 13, lines 27-37 and figure 7](For instance, on column 4, lines 36-38 and on abstract, it has been disclosed that an interface is coupled to the data path and forms a command pathway between the plurality of initiators and the physical device. Furthermore, at least on column 13, lines 27-37, the following has been disclosed. " The protocol interface 710 performs virtual/physical mapping to facilitate virtualization of storage LUNs. The protocol interface 710 receives commands and configures information blocks for transmission, for example by matching status to the correct command, and supplying header information for status frames. The protocol interface 710 also handles initiator protocol, for example by obtaining unit attention of the first access of an initiator. The protocol interface 710 can manage signals from

multiple LUNs. The protocol interface 710 serves as a common interface point for external communications.")

- **An act of retrieving security information from a database [Figure 7, ref. Num "722" or/and "724"] that includes information that is relevant to configuring security for any of the plurality of initiators; an act of identifying a security configuration of the selected initiator using the retrieved security information;**[Column 17, lines 38-46 and column 16, lines 40-47 and Column 15, lines 62-column 16, lines 47; column 13, lines 46-column 14, line 4]

- **An act of determining if the identified security configuration were applied to the selected initiator, the applied identified security configuration would not cause the selected initiator to conflict with any of the existing security configurations of other of the plurality of initiators; and upon determining that the identified security configuration would not cause the selected initiator to conflict with any of the existing security configurations of the other of the plurality of initiators, an act of configuring the selected initiator using the identified security configuration. [See, abstract and claim 1]** (an <u>interface</u> coupled to the data path and forming a command pathway between the plurality of <u>initiators</u> and the physical device; and a controller coupled to the data path and coupled to the <u>interface,</u> the controller comprising an executable process that creates a virtual device object that resolves conflicting concurrent attempts to access the physical device by a plurality of <u>initiators,</u> the virtual device object being capable of protecting state of the physical device during successive data transfer and media movement operations by emulating responses of the physical device and redirecting access to the physical device when the physical device becomes available.)

Dicorpo does not explicitly teach that **retrieving security information that is relevant to configure security from a database.**

However, in the same field of endeavor, **Narain, the secondary reference on the record, discloses the concept of retrieving security information that is relevant to configure security from a database.** [See, at least figure 1, ref. Num "150" and paragraph 0028; paragraph 0007; paragraph 0015].

Furthermore Narain on paragraph, 0021 and 0047-0048 including table 1, shows how for instance, IPsec has a number of security configuration options and must be configured with the appropriate IPSec security information to avoid that the security information of one does not conflict with the security information of any other security information specially when they are supplied by different venders, by providing intermediate abstractions and forming vendor neutral requirements that represents instructions that are directly related to setting security configuration parameters of devices that support or implement end-to-end requirement. [See also paragraph 0006 and claim 6] *(Examiner would also indict that the above security configuration problem is what the applicants invention is trying to solve. See for instance applicant specification on page 4, paragraph 0007)*

- **However, after the claims are amended, the reference on the record namely the combination of Dicorpo and Narain,** does not disclose the following (underlined) limitation added in this amendment.

    Neither **Dicorpo nor Narain** teach or suggest exposing **an abstraction component comprising logic that** that may be used to configure any of the plurality of initiators, **the abstraction component being a component of an**

initiator abstraction module configured to enforce consistent security

configuration settings between initiators, as recited in the independent

claims.

Furthermore, neither Dicorpo nor Narain teach or suggest receiving **registration**

information on the occurrence of some event through the **abstraction**

component that a selected initiator from among the plurality of initiators is to

be configured to communicate with a selected target device, as recited in claims.

Therefore, as applicant persuasively argued, none of the prior art of

record taken singularly of in combination teaches computer system that

includes a plurality of initiators, each for initiating communication with target

devices over the a network, **with the above underlined functional limitation**

together with all other limitations recited in the respective independent claims.

For this reason, independent claims **1, 14 and 24** are found to be novel

and are allowed.

7.   The dependent **claims** which are dependent on the above **independent claims**

1, 14 and 24 being further limiting to the independent claim, definite and

enabled by the specification are also allowed.

Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should

preferably accompany the issue fee. Such submission should be clearly labeled

"Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Samson B Lemma whose telephone number is

571-272-3806. The examiner can normally be reached on Monday-Friday (8:00

am---4: 30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, BARRON JR GILBERTO can be reached on 571-272-3799. The fax

phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private

PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free).

SAMSON LEMMA
S.L.
06/01/2007

KAMBIZ ZAND
SUPERVISORY PATENT EXAMINER